BIOTECHNOLOGY
SYSTEMS
BRANCH

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++s (/s

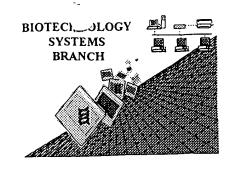# RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: *09/723,326*

Source: *O/PE*

Date Processed by STIC: *5-23-01*

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY
FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.
PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)
PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER VERSION 3.0 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.
Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO).
Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

<u>Checker Version 3.0 can be down loaded from the USPTO website at the following address:</u>
http://www.uspto.gov/web/offices/pac/checker

Raw Sequence Listing Error Summary

| ERROR DETECTED | SUGGESTED CORRECTION | SERIAL NUMBER: *09/723, 326* |

1____Wrapped Nucleics   The number/text at the end of each line "wrapped" down to the next line. This may occur if your file
    Wrapped Aminos   was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will
    prevent "wrapping."

2____Invalid Line Length   The rules require that a line not exceed 72 characters in length. This includes white spaces.

3____Misaligned Amino   The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers;
    Numbering   use space characters, instead.

4____Non-ASCII   The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please
    ensure your subsequent submission is saved in ASCII text.

5____Variable Length   Sequence(s)____contain n's or Xaa's representing more than one residue. Per Sequence Rules,
    each n or Xaa can only represent a single residue. Please present the maximum number of each
    residue having variable length and indicate in the <220>-<223> section that some may be missing.

6____PatentIn 2.0   A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid
    "bug"   sequences(s) _____. Normally, PatentIn would automatically generate this section from the
    previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to
    the subsequent amino acid sequence. **This applies to the mandatory <220>-<223> sections for**
    Artificial or Unknown sequences.

7____Skipped Sequences   Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence:
    (OLD RULES)   (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
    (i)   SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
    (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
    This sequence is intentionally skipped

    Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.

8____Skipped Sequences   Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence.
    (NEW RULES)   <210> sequence id number
    <400> sequence id number
    000

9____Use of n's or Xaa's   Use of n's and/or Xaa's have been detected in the Sequence Listing.
    (NEW RULES)   Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
    In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

10____Invalid <213>   Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or
    Response   scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or
    is Artificial Sequence

11 ✓ Use of <220>   Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses.
    Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or
    "Unknown." Please explain source of genetic material in <220> to <223> section.
    (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32)   (Sec. 1.823 of Sequence Rules)

12____PatentIn 2.0   Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file,
    "bug"   resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence
    listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

RAW SEQUENCE LISTING   DATE: 05/23/2001
PATENT APPLICATION: **US/09/723,326**   TIME: 10:32:47

Input Set : **A:\09723326.txt**
Output Set: **C:\CRF3\05232001\I723326.raw**

```
 3 <110> APPLICANT: WEBSTER, Keith A.
 5 <120> TITLE OF INVENTION: A Molecular Switch for Regulating Mammalian Gene Expression
 7 <130> FILE REFERENCE: 70373/268461 - UM99-29
 9 <140> CURRENT APPLICATION NUMBER: US 09/723,326
10 <141> CURRENT FILING DATE: 2000-11-28
12 <150> PRIOR APPLICATION NUMBER: US 60/171,597
13 <151> PRIOR FILING DATE: 1999-12-23
15 <160> NUMBER OF SEQ ID NOS: 16
17 <170> SOFTWARE: PatentIn version 3.0
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 21
21 <212> TYPE: DNA
C--> 22 <213> ORGANISM: Artificial
24 <220> FEATURE:
25 <223> OTHER INFORMATION: oligonucleotide
27 <400> SEQUENCE: 1
28 tgtcacgtcc tgcacgacgt a
31 <210> SEQ ID NO: 2
32 <211> LENGTH: 22
33 <212> TYPE: DNA
C--> 34 <213> ORGANISM: Artificial
36 <220> FEATURE:
37 <223> OTHER INFORMATION: oligonucleotide
39 <400> SEQUENCE: 2
40 cttcagcacc gcggacagtg cc
43 <210> SEQ ID NO: 3
44 <211> LENGTH: 22
45 <212> TYPE: DNA
C--> 46 <213> ORGANISM: Artificial
48 <220> FEATURE:
49 <223> OTHER INFORMATION: oligonucleotide
51 <400> SEQUENCE: 3
52 tgtccattcc tgcacgacgt ac
55 <210> SEQ ID NO: 4
56 <211> LENGTH: 22
57 <212> TYPE: DNA
C--> 58 <213> ORGANISM: Artificial
60 <220> FEATURE:
61 <223> OTHER INFORMATION: oligonucleotide
63 <400> SEQUENCE: 4
64 cttcagcacc gcttacagtg cc
67 <210> SEQ ID NO: 5
68 <211> LENGTH: 43
69 <212> TYPE: DNA
C--> 70 <213> ORGANISM: Artificial
72 <220> FEATURE:
73 <223> OTHER INFORMATION: oligonucleotide
```

Does Not Comply
Corrected Diskette Needed
global error

Circled <223> response must be more specific. What is the source of the genetic material in the artificial sequences? See # 11 on the Error Summary Sheet.

Note: This error is indicated throughout the sequence listing. please review and correct.

RAW SEQUENCE LISTING   DATE: 05/23/2001
PATENT APPLICATION: **US/09/723,326**   TIME: 10:32:47

Input Set : **A:\09723326.txt**
Output Set: **C:\CRF3\05232001\I723326.raw**

```
75 <400> SEQUENCE: 5
76 cttcagcacc gcggacagtg cctgtcacgt cctgcacgac gta                43
79 <210> SEQ ID NO: 6
80 <211> LENGTH: 86
81 <212> TYPE: DNA
C--> 82 <213> ORGANISM: Artificial
84 <220> FEATURE:
85 <223> OTHER INFORMATION: oligonucleotide
87 <400> SEQUENCE: 6
88 cttcagcacc gcggacagtg cctgtcacgt cctgcacgac gtacttcagc accgcggaca   60
90 gtgcctgtca cgtcctgcac gacgta                86
93 <210> SEQ ID NO: 7
94 <211> LENGTH: 123
95 <212> TYPE: DNA
C--> 96 <213> ORGANISM: Artificial
98 <220> FEATURE:
99 <223> OTHER INFORMATION: oligonucleotide
101 <400> SEQUENCE: 7
102 cttcagcacc gcggacagtg cctgtcacgt cctgcacgac ttcagcaccg cggacagtgc   60
104 ctgtcacgtc ctgcacgact tcagcaccgc ggacagtgcc tgtcacgtcc tgcacgacgg  120
106 tac                123
109 <210> SEQ ID NO: 8
110 <211> LENGTH: 33
111 <212> TYPE: DNA
C--> 112 <213> ORGANISM: Artificial
114 <220> FEATURE:
115 <223> OTHER INFORMATION: oligonucleotide
117 <400> SEQUENCE: 8
118 cttcagcacc gcggacagtc acgtcctgca cga                33
121 <210> SEQ ID NO: 9
122 <211> LENGTH: 129
123 <212> TYPE: DNA
C--> 124 <213> ORGANISM: Artificial
126 <220> FEATURE:
127 <223> OTHER INFORMATION: oligonucleotide
129 <400> SEQUENCE: 9
130 cttcagcacc gcttacagtg cctgtcacgt cctgcacgac gtacttcagc accgcttaca   60
132 gtgcctgtca cgtcctgcac gacgtacttc agcaccgctt acagtgcctg tcacgtcctg  120
134 cacgacgta                129
137 <210> SEQ ID NO: 10
138 <211> LENGTH: 132
139 <212> TYPE: DNA
C--> 140 <213> ORGANISM: Artificial
142 <220> FEATURE:
143 <223> OTHER INFORMATION: oligonucleotide
145 <400> SEQUENCE: 10
146 cttcagcacc gcggacagtg cctgtccatt cctgcacgac gtaccttcag caccgcggac   60
148 agtgcctgtc cattcctgca cgacgtacct tcagcaccgc ggacagtgcc tgtccattcc  120
150 tgcacgacgt ac                132
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/723,326

DATE: 05/23/2001
TIME: 10:32:47

Input Set : A:\09723326.txt
Output Set: C:\CRF3\05232001\I723326.raw

```
        153 <210> SEQ ID NO: 11
        154 <211> LENGTH: 116
        155 <212> TYPE: DNA
C--> 156 <213> ORGANISM: Artificial
        158 <220> FEATURE:
        159 <223> OTHER INFORMATION: oligonucleotide
        161 <400> SEQUENCE: 11
        162 cttcagcacc gcggacagtt gaggggactt tcccaggctt cagcaccgcg gacagttgag    60
        164 gggactttcc caggcttcag caccgcggac agttgagggg actttcccag gcgtac       116
        167 <210> SEQ ID NO: 12
        168 <211> LENGTH: 116
        169 <212> TYPE: DNA
C--> 170 <213> ORGANISM: Artificial
        172 <220> FEATURE:
        173 <223> OTHER INFORMATION: oligonucleotide
        175 <400> SEQUENCE: 12
        176 cttcagcacc gcttacagtt gaggggactt tcccaggctt cagcaccgct tacagttgag    60
        178 gggactttcc caggcttcag caccgcttac agttgagggg actttcccag gcgtac       116
        181 <210> SEQ ID NO: 13
        182 <211> LENGTH: 199
        183 <212> TYPE: DNA
C--> 184 <213> ORGANISM: Artificial
        186 <220> FEATURE:
        187 <223> OTHER INFORMATION: oligonucleotide
        189 <400> SEQUENCE: 13
        190 cttcagcacc gcggacagtt gacacgatca cctcccatta aggagagaga tctccttcag    60
        192 caccgcggac agttgacacg atcacctccc attaaggaga gagatctcct tcagcaccgc   120
        194 ggacagttga cacgatcacc tcccattaag gagagagatc tccttcagca ccgcggacag   180
        196 ttgaggggac tttcccagg                                                199
        199 <210> SEQ ID NO: 14
        200 <211> LENGTH: 162
        201 <212> TYPE: DNA
C--> 202 <213> ORGANISM: Artificial
        204 <220> FEATURE:
        205 <223> OTHER INFORMATION: oligonucleotide
        207 <400> SEQUENCE: 14
        208 cttcagcacc gcggacagtt gagcttcggg gcttttgcac tcgtcccggc tctacttcag    60
        210 caccgcggac agttgagctt cggggctttt gcactcgtcc cggctctact tcagcaccgc   120
        212 ggacagttga gcttcggggc ttttgcactc gtcccggctc ta                     162
        215 <210> SEQ ID NO: 15
        216 <211> LENGTH: 52
        217 <212> TYPE: DNA
C--> 218 <213> ORGANISM: Artificial
        220 <220> FEATURE:
        221 <223> OTHER INFORMATION: oligonucleotide
        223 <400> SEQUENCE: 15
        224 ctggccttat ctccggctgc acgttgcctg ttggtgacta ataacacaat aa            52
        227 <210> SEQ ID NO: 16
        228 <211> LENGTH: 162
```

Input Set : **A:\09723326.txt**
Output Set: **C:\CRF3\05232001\I723326.raw**

```
    229 <212> TYPE: DNA
C--> 230 <213> ORGANISM: Artificial
    232 <220> FEATURE:
    233 <223> OTHER INFORMATION: oligonucleotide
    235 <400> SEQUENCE: 16
    236 cttcagcacc gcggacagtt gacacgatca cctcccatta aggagagaga tctccttcag    60
    238 caccgcggac agttgacacg atcacctccc attaaggaga gagatctcct tcagcaccgc   120
    240 ggacagttga cacgatcacc tcccattaag gagagagatc tc                      162
```

VERIFICATION SUMMARY
PATENT APPLICATION: **US/09/723,326**

DATE: 05/23/2001
TIME: 10:32:48

Input Set : **A:\09723326.txt**
Output Set: **C:\CRF3\05232001\I723326.raw**

```
L:22  M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:1
L:34  M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:2
L:46  M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:3
L:58  M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:4
L:70  M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:5
L:82  M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:6
L:96  M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:7
L:112 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:8
L:124 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:9
L:140 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:10
L:156 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:11
L:170 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:12
L:184 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:13
L:202 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:14
L:218 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:15
L:230 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:16
```